



## SEQUENCE LISTING

<110> Gaiger, Alexander  
Cheever, Martin A.

<120> COMPOSITIONS AND METHODS FOR WT1  
SPECIFIC IMMUNOTHERAPY

<130> 210121.465C3

<140> US 09/685,830

<141> 2000-10-09

<150> US 09/684,361

<151> 2000-10-06

<150> US 09/276,484

<151> 1999-03-25

<150> US 09/164,223

<151> 1998-09-30

<160> 326

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 <213> Mus musculus

<400> 282  
 Asn Ala Pro Tyr Leu Pro Ser Cys Leu  
 1 5

<210> 283  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 283  
 Asn Leu Gly Ala Thr Leu Lys Gly Met  
 1 5

<210> 284  
 <211> 9  
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 <213> Mus musculus

<400> 284  
 Asn Leu Tyr Gln Met Thr Ser Gln Leu  
 1 5

<210> 285  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 285  
 Asn Met Thr Lys Leu His Val Ala Leu  
 1 5

<210> 286  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 286  
 Asn Gln Met Asn Leu Gly Ala Thr Leu  
 1 5

<210> 287  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 287  
 Pro Gly Ala Ser Ala Tyr Gly Ser Leu  
 1 5

<210> 288  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 288  
 Gln Ala Ser Ser Gly Gln Ala Arg Met  
 1 5

<210> 289  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 289  
 Gln Met Thr Ser Gln Leu Glu Cys Met  
 1 5

<210> 290  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 290  
 Gln Gln Tyr Ser Val Pro Pro Pro Val  
 1 5

<210> 291  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 291  
 Gln Tyr Arg Ile His Thr His Gly Val  
 1 5

<210> 292  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 292  
 Gln Tyr Ser Val Pro Pro Pro Val Tyr  
 1 5

<210> 293  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 293  
 Arg Met Phe Pro Asn Ala Pro Tyr Leu  
 1 5

<210> 294  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 294  
 Arg Thr Pro Tyr Ser Ser Asp Asn Leu  
 1 5

<210> 295  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 295  
 Arg Val Ser Gly Val Ala Pro Thr Leu  
 1 5

<210> 296  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 296  
 Ser Cys Leu Glu Ser Gln Pro Thr Ile  
 1 5

<210> 297  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 297  
 Ser Cys Gln Lys Lys Phe Ala Arg Ser  
 1 5

<210> 298  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 298  
 Ser Asp Val Arg Asp Leu Asn Ala Leu  
 1 5

<210> 299  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 299  
 Ser Leu Gly Glu Gln Gln Tyr Ser Val  
 1 5

<210> 300  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 300  
 Thr Cys Gln Arg Lys Phe Ser Arg Ser  
 1 5

<210> 301  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 301  
 Thr Glu Gly Gln Ser Asn His Gly Ile  
 1 5

<210> 302  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 302  
 Thr Leu His Phe Ser Gly Gln Phe Thr  
 1 5

<210> 303  
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 <212> PRT  
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<400> 303  
 Thr Leu Val Arg Ser Ala Ser Glu Thr  
 1 5

<210> 304  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 304  
 Val Leu Asp Phe Ala Pro Pro Gly Ala  
 1 5

<210> 305  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 305  
 Trp Asn Gln Met Asn Leu Gly Ala Thr  
 1 5

<210> 306  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 306  
 Tyr Phe Lys Leu Ser His Leu Gln Met  
 1 5

<210> 307  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 307  
 Tyr Gln Met Thr Ser Gln Leu Glu Cys  
 1 5

<210> 308  
 <211> 9  
 <212> PRT  
 <213> Mus musculus

<400> 308  
 Tyr Ser Ser Asp Asn Leu Tyr Gln Met  
 1 5

<210> 309  
 <211> 6  
 <212> PRT  
 <213> Homo sapien

<400> 309  
 Gly Ala Ala Gln Trp Ala  
 1 5

<210> 310  
 <211> 12  
 <212> PRT  
 <213> Homo sapien

<400> 310  
 Ala Ser Ala Tyr Gly Ser Leu Gly Gly Pro Ala Pro  
 1 5 10

<210> 311  
 <211> 15  
 <212> PRT  
 <213> Homo sapien

<400> 311  
 Ala Phe Thr Val His Phe Ser Gly Gln Phe Thr Gly Thr Ala Gly  
 1 5 10 15

<210> 312  
 <211> 5  
 <212> PRT  
 <213> Homo sapien

<400> 312  
 His Ala Ala Gln Phe  
 1 5

<210> 313  
 <211> 32  
 <212> PRT  
 <213> Homo sapien

<400> 313  
 Cys His Thr Pro Thr Asp Ser Cys Thr Gly Ser Gln Ala Leu Leu Leu  
 1 5 10 15  
 Arg Thr Pro Tyr Ser Ser Asp Asn Leu Tyr Gln Met Thr Ser Gln Leu  
 20 25 30

<210> 314  
 <211> 32  
 <212> PRT  
 <213> Homo sapien

<400> 314  
 Arg Ile His Thr His Gly Val Phe Arg Gly Ile Gln Asp Val Arg Arg  
 1 5 10 15  
 Val Pro Gly Val Ala Pro Thr Leu Val Arg Ser Ala Ser Glu Thr Ser  
 20 25 30

<210> 315  
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 <212> PRT  
 <213> Homo sapien

<400> 315  
 Arg Tyr Phe Lys  
 1

<210> 316  
 <211> 14  
 <212> PRT  
 <213> Homo sapien

<400> 316  
 Glu Arg Arg Phe Ser Arg Ser Asp Gln Leu Lys Arg His Gln  
 1 5 10

<210> 317  
 <211> 22  
 <212> PRT  
 <213> Homo sapien

<400> 317  
 Gln Arg Lys Phe Ser Arg Ser Asp His Leu Lys Thr His Thr Arg Thr  
 1 5 10 15  
 His Thr Gly Lys Thr Ser  
 20

<210> 318  
 <211> 21  
 <212> PRT  
 <213> Homo sapien

<400> 318  
 Cys Gln Lys Lys Phe Ala Arg Ser Asp Glu Leu Val Arg His His Asn  
 1 5 10 15  
 Met His Gln Arg Asn  
 20

<210> 319  
 <211> 449  
 <212> PRT  
 <213> Homo sapien

<400> 319  
 Met Gly Ser Asp Val Arg Asp Leu Asn Ala Leu Leu Pro Ala Val Pro  
 1 5 10 15  
 Ser Leu Gly Gly Gly Gly Gly Cys Ala Leu Pro Val Ser Gly Ala Ala  
 20 25 30  
 Gln Trp Ala Pro Val Leu Asp Phe Ala Pro Pro Gly Ala Ser Ala Tyr  
 35 40 45  
 Gly Ser Leu Gly Gly Pro Ala Pro Pro Pro Ala Pro Pro Pro Pro  
 50 55 60  
 Pro Pro Pro Pro His Ser Phe Ile Lys Gln Glu Pro Ser Trp Gly Gly  
 65 70 75 80  
 Ala Glu Pro His Glu Glu Gln Cys Leu Ser Ala Phe Thr Val His Phe  
 85 90 95  
 Ser Gly Gln Phe Thr Gly Thr Ala Gly Ala Cys Arg Tyr Gly Pro Phe  
 100 105 110  
 Gly Pro Pro Pro Ser Gln Ala Ser Ser Gly Gln Ala Arg Met Phe  
 115 120 125  
 Pro Asn Ala Pro Tyr Leu Pro Ser Cys Leu Glu Ser Gln Pro Ala Ile  
 130 135 140  
 Arg Asn Gln Gly Tyr Ser Thr Val Thr Phe Asp Gly Thr Pro Ser Tyr  
 145 150 155 160  
 Gly His Thr Pro Ser His His Ala Ala Gln Phe Pro Asn His Ser Phe

Lys	His	Glu	Asp	Pro	Met	Gly	Gln	Gln	Gly	Ser	Leu	Gly	Glu	Gln	Gln	165	170	175
			180					185					190					
Tyr	Ser	Val	Pro	Pro	Pro	Val	Tyr	Gly	Cys	His	Thr	Pro	Thr	Asp	Ser			
		195						200					205					
Cys	Thr	Gly	Ser	Gln	Ala	Leu	Leu	Leu	Arg	Thr	Pro	Tyr	Ser	Ser	Asp			
		210				215					220							
Asn	Leu	Tyr	Gln	Met	Thr	Ser	Gln	Leu	Glu	Cys	Met	Thr	Trp	Asn	Gln			
225					230					235					240			
Met	Asn	Leu	Gly	Ala	Thr	Leu	Lys	Gly	Val	Ala	Ala	Gly	Ser	Ser	Ser			
				245					250						255			
Ser	Val	Lys	Trp	Thr	Glu	Gly	Gln	Ser	Asn	His	Ser	Thr	Gly	Tyr	Glu			
			260					265					270					
Ser	Asp	Asn	His	Thr	Thr	Pro	Ile	Leu	Cys	Gly	Ala	Gln	Tyr	Arg	Ile			
		275					280					285						
His	Thr	His	Gly	Val	Phe	Arg	Gly	Ile	Gln	Asp	Val	Arg	Arg	Val	Pro			
		290				295					300							
Gly	Val	Ala	Pro	Thr	Leu	Val	Arg	Ser	Ala	Ser	Glu	Thr	Ser	Glu	Lys			
305					310				315						320			
Arg	Pro	Phe	Met	Cys	Ala	Tyr	Pro	Gly	Cys	Asn	Lys	Arg	Tyr	Phe	Lys			
				325					330						335			
Leu	Ser	His	Leu	Gln	Met	His	Ser	Arg	Lys	His	Thr	Gly	Glu	Lys	Pro			
			340					345					350					
Tyr	Gln	Cys	Asp	Phe	Lys	Asp	Cys	Glu	Arg	Arg	Phe	Ser	Arg	Ser	Asp			
		355					360					365						
Gln	Leu	Lys	Arg	His	Gln	Arg	Arg	His	Thr	Gly	Val	Lys	Pro	Phe	Gln			
	370					375					380							
Cys	Lys	Thr	Cys	Gln	Arg	Lys	Phe	Ser	Arg	Ser	Asp	His	Leu	Lys	Thr			
385					390					395					400			
His	Thr	Arg	Thr	His	Thr	Gly	Lys	Thr	Ser	Glu	Lys	Pro	Phe	Ser	Cys			
				405					410						415			
Arg	Trp	Pro	Ser	Cys	Gln	Lys	Lys	Phe	Ala	Arg	Ser	Asp	Glu	Leu	Val			
			420					425					430					
Arg	His	His	Asn	Met	His	Gln	Arg	Asn	Met	Thr	Lys	Leu	Gln	Leu	Ala			
		435					440					445						

Leu

&lt;210&gt; 320

&lt;211&gt; 449

&lt;212&gt; PRT

&lt;213&gt; Mus musculus

&lt;400&gt; 320

Met	Gly	Ser	Asp	Val	Arg	Asp	Leu	Asn	Ala	Leu	Leu	Pro	Ala	Val	Ser			
1				5					10					15				
Ser	Leu	Gly	Gly	Gly	Gly	Cys	Gly	Leu	Pro	Val	Ser	Gly	Ala	Ala				
		20					25					30						
Gln	Trp	Ala	Pro	Val	Leu	Asp	Phe	Ala	Pro	Pro	Gly	Ala	Ser	Ala	Tyr			
		35					40					45						
Gly	Ser	Leu	Gly	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Pro	Pro	Pro	Pro	Pro			
	50					55					60							
Pro	Pro	Pro	Pro	His	Ser	Phe	Ile	Lys	Gln	Glu	Pro	Ser	Trp	Gly	Gly			
65					70					75					80			



Ala	Glu	Pro	His	Glu	Glu	Gln	Cys	Leu	Ser	Ala	Phe	Thr	Leu	His	Phe	
				85					90					95		
Ser	Gly	Gln	Phe	Thr	Gly	Thr	Ala	Gly	Ala	Cys	Arg	Tyr	Gly	Pro	Phe	
			100					105					110			
Gly	Pro	Pro	Pro	Pro	Ser	Gln	Ala	Ser	Ser	Gly	Gln	Ala	Arg	Met	Phe	
		115					120					125				
Pro	Asn	Ala	Pro	Tyr	Leu	Pro	Ser	Cys	Leu	Glu	Ser	Gln	Pro	Thr	Ile	
	130					135					140					
Arg	Asn	Gln	Gly	Tyr	Ser	Thr	Val	Thr	Phe	Asp	Gly	Ala	Pro	Ser	Tyr	
145					150					155					160	
Gly	His	Thr	Pro	Ser	His	His	Ala	Ala	Gln	Phe	Pro	Asn	His	Ser	Phe	
				165					170					175		
Lys	His	Glu	Asp	Pro	Met	Gly	Gln	Gln	Gly	Ser	Leu	Gly	Glu	Gln	Gln	
		180						185					190			
Tyr	Ser	Val	Pro	Pro	Pro	Val	Tyr	Gly	Cys	His	Thr	Pro	Thr	Asp	Ser	
		195					200					205				
Cys	Thr	Gly	Ser	Gln	Ala	Leu	Leu	Leu	Arg	Thr	Pro	Tyr	Ser	Ser	Asp	
	210					215					220					
Asn	Leu	Tyr	Gln	Met	Thr	Ser	Gln	Leu	Glu	Cys	Met	Thr	Trp	Asn	Gln	
225					230					235					240	
Met	Asn	Leu	Gly	Ala	Thr	Leu	Lys	Gly	Met	Ala	Ala	Gly	Ser	Ser	Ser	
				245					250					255		
Ser	Val	Lys	Trp	Thr	Glu	Gly	Gln	Ser	Asn	His	Gly	Ile	Gly	Tyr	Glu	
		260					265					270				
Ser	Asp	Asn	His	Thr	Ala	Pro	Ile	Leu	Cys	Gly	Ala	Gln	Tyr	Arg	Ile	
		275					280					285				
His	Thr	His	Gly	Val	Phe	Arg	Gly	Ile	Gln	Asp	Val	Arg	Arg	Val	Ser	
	290					295					300					
Gly	Val	Ala	Pro	Thr	Leu	Val	Arg	Ser	Ala	Ser	Glu	Thr	Ser	Glu	Lys	
305					310					315					320	
Arg	Pro	Phe	Met	Cys	Ala	Tyr	Pro	Gly	Cys	Asn	Lys	Arg	Tyr	Phe	Lys	
				325					330					335		
Leu	Ser	His	Leu	Gln	Met	His	Ser	Arg	Lys	His	Thr	Gly	Glu	Lys	Pro	
			340					345					350			
Tyr	Gln	Cys	Asp	Phe	Lys	Asp	Cys	Glu	Arg	Arg	Phe	Ser	Arg	Ser	Asp	
		355					360					365				
Gln	Leu	Lys	Arg	His	Gln	Arg	Arg	His	Thr	Gly	Val	Lys	Pro	Phe	Gln	
	370					375					380					
Cys	Lys	Thr	Cys	Gln	Arg	Lys	Phe	Ser	Arg	Ser	Asp	His	Leu	Lys	Thr	
385					390					395					400	
His	Thr	Arg	Thr	His	Thr	Gly	Lys	Thr	Ser	Glu	Lys	Pro	Phe	Ser	Cys	
				405					410					415		
Arg	Trp	His	Ser	Cys	Gln	Lys	Lys	Phe	Ala	Arg	Ser	Asp	Glu	Leu	Val	
			420					425					430			
Arg	His	His	Asn	Met	His	Gln	Arg	Asn	Met	Thr	Lys	Leu	His	Val	Ala	
			435				440					445				
Leu																

&lt;210&gt; 321

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Homo sapien and Mus musculus

<400> 321  
 Pro Ser Gln Ala Ser Ser Gly Gln Ala  
 1 5

<210> 322  
 <211> 9  
 <212> PRT  
 <213> Homo sapien and Mus musculus

<400> 322  
 Ser Ser Gly Gln Ala Arg Met Phe Pro  
 1 5

<210> 323  
 <211> 9  
 <212> PRT  
 <213> Homo sapien and Mus musculus

<400> 323  
 Gln Ala Arg Met Phe Pro Asn Ala Pro  
 1 5

<210> 324  
 <211> 9  
 <212> PRT  
 <213> Homo sapien and Mus musculus

<400> 324  
 Met Phe Pro Asn Ala Pro Tyr Leu Pro  
 1 5

<210> 325  
 <211> 9  
 <212> PRT  
 <213> Homo sapien and Mus musculus

<400> 325  
 Pro Asn Ala Pro Tyr Leu Pro Ser Cys  
 1 5

<210> 326  
 <211> 9  
 <212> PRT  
 <213> Homo sapien and Mus musculus

<400> 326  
 Ala Pro Tyr Leu Pro Ser Cys Leu Glu  
 1 5